

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended): A method ~~Method~~ of preparing a birefringent marking comprising: ~~polymerised liquid crystal material, by~~
printing a polymerisable liquid crystal material onto at least one surface of a reflective substrate; and
polymerising the liquid crystal material,
whereby a birefringent marking is formed on said reflective substrate.
2. (Currently Amended): A method ~~Method~~ according to claim 1, wherein the liquid crystal material is a nematic or smectic liquid crystal material.
3. (Currently Amended): A method ~~Method~~ according to claim 1, wherein the substrate comprises at least one metallic or metallised layer.
4. (Currently Amended): A method ~~Method~~ according to claim 3, wherein the metal is selected from aluminium, gold and copper.
5. (Currently Amended): A method ~~Method~~ according to claim 1, wherein the substrate comprises at least one layer of reflective pigments.
6. (Currently Amended): A method ~~Method~~ according to claim 5, wherein the reflective pigments are selected from interference or pearlescent pigments and liquid crystal pigments.
7. (Currently Amended): A method ~~Method~~ according to claim 1, wherein the liquid crystal material comprises at least one compound which induces and/or enhances planar alignment.

8. ((Currently Amended): A method ~~Method~~ according to claim 7, wherein the compound inducing and/or enhancing a planar alignment is a surfactant.

9. (Currently Amended): A method ~~Method~~ according to Claim 1, wherein the polymerised liquid crystal material ~~layer~~ has a splayed structure.

10. (Currently Amended): A method ~~Method~~ according to claim ~~1~~ 9, wherein the polymerised liquid crystal ~~layer~~ material has a ~~exhibits substantially planar structure alignment at its surface facing the substrate and substantially homeotropic alignment at its opposite surface.~~

11. (Currently Amended): A birefringent ~~Birefringent~~ marking obtainable by a method according to Claim 1.

12. (Currently Amended): In a method of applying a ~~Use of a method or a birefringent marking according to Claim 1 in decorative, security, authentication or identification applications marking to an item, the improvement wherein said marking is a~~ birefringent marking prepared according to claim 1.

13. (Currently Amended): A security ~~Security~~, authentication or identification marking, thread or device comprising at least one birefringent marking prepared according to claim 10.

14. (Currently Amended): In a document ~~Document~~ of value, a hot stamping foil, a reflective foil, or an optical data storage device, the improvement wherein said document of value, hot stamping foil, reflective foil, or optical data storage device has at least one birefringent marking according to ~~of claim 11 or at least one security, authentication or identification marking, thread or device.~~

15. (Currently Amended): A document ~~Document~~ of value, a hot stamping foil, a reflective foil, or an optical data storage device comprising at least one security,

authentication or identification marking, thread or device according to claim 13.

16. (New): A method of preparing a birefringent marking comprising: polymerizing a polymerizable liquid crystal material that has been printed onto at least one surface of a reflective substrate.

17. (New): A method according to claim 2, wherein the polymerised liquid crystal material has a planar structure.

18. (New): A security, authentication, or identification marking, thread or device comprising at least one birefringent marking prepared according to claim 17.

19. (New): A method according to claim 1, wherein said birefringent marking is prepared separately on said at least one surface of said reflective substrate; and then said marking and reflective substrate are applied to a document of value.

20. (New): A method according to claim 2, wherein said birefringent marking is prepared separately on said at least one surface of said reflective substrate; and then said marking and reflective substrate are applied to a document of value.

21. (New): A method according to claim 1, wherein said polymerizable liquid crystal material comprises a liquid crystal material and a solvent.

22. (New): A method according to claim 1, wherein said polymerizable liquid crystal material is printed onto the reflective substrate by screen printing, offset printing, dry offset printing reel-to-reel printing, letter press printing, gravure printing, rotogravure printing, flexographic printing, intaglio printing, pad printing, heat-seal printing, ink-jet printing, thermal transfer printing or printing by means of a stamp or printing plate.

23. (New): A method according to claim 1, wherein printing of said polymerizable liquid crystal material onto the reflective substrate induces or enhances

spontaneous alignment of the polymerizable liquid crystal material on said reflective substrate.

24. (New): A method according to claim 1, wherein said polymerizable liquid crystal material further comprises a polymeric binder or one or more monomers capable of forming a polymeric binder.

25. (New): A method according to claim 1, wherein said polymerizable liquid crystal material does not containing a binder.

26. (New): A method according to claim 8, wherein said surfactant is a fluorocarbon surfactant.

27. (New): A method according to claim 28, wherein said fluorocarbons surfactant is of formula I:



wherein

n is an integer from 4 to 12, and

x is an integer from 5 to 15.

28. (New): A method according to claim 7, wherein the amount of said compound in said polymerizable liquid crystal material 0.01 -5 weight %.

29. (New): A method according to claim 1, wherein said birefringent marking has a birefringence in the range from 0.1 to 0.3 and a thickness from 0.5 to 20 μm .

30. (New): A method according to claim 1, wherein said birefringent marking further comprises one or more further layers applied onto said birefringent marking.

31. (New): A method according to claim 30, wherein said one or more further layers are selected from a protecting layer, a support layer, an adhesive layer, a reflecting layer, an optical retardation layer, a color filter, a polarizer, or combinations thereof.

32. (New): A method according to claim 2, wherein said polymerizable liquid crystal material further comprises a surfactant, said polymerizable liquid crystal material is printed onto discrete regions of said reflective substrate, and said reflective substrate is a metallized or metal substrate.

33. (New): A method according to claim 32, wherein said liquid crystal material is a nematic liquid crystal material.

34. (New): A method according to claim 2, wherein said polymerizable liquid crystal material further comprises a surfactant, said polymerizable liquid crystal material is printed onto discrete regions of a paper substrate that is covered by a layer of interference pigments dispersed in a transparent binder.

35. (New): A method according to claim 34, wherein said liquid crystal material is a nematic liquid crystal material.

36. (New): A method according to claim 1, wherein said birefringent marking is invisible under unpolarized light and is visible when viewed through a polariser.